

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 29, 2015

Paula Bodey Registration Manager FMC Corporation 1735 Market St., RM 1978 Philadelphia, PA 19103

Subject: PRIA Label Amendment – Addition of chemigation use on soybeans, fruiting vegetables, and cucurbit vegetables; addition of at-planting soybean

directions; supplemental label

Product Name: TOPGUARD FUNGICIDE

EPA Registration Number: 279-3557

Application Date: 05/25/2015 Decision Number: 505620

### Dear Ms. Bodey:

The amended master and supplemental label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. The master labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, you may contact Maryam K. Muhammad at 703-347-0301 or via email at muhammad.maryam@epa.gov.

Sincerely,

Hope Johnson, Product Manager 21

Fungicide Branch

Registration Division (7505P) Office of Pesticide Programs

Enclosure: Flutriafol. Label Amendments for Soybean, Fruiting Vegetables Crop Group (CG) 8-

10, and Cucurbit Vegetables CG 9. Summary of Analytical Chemistry and Residue

Data.

# ACCEPTED

Dec 29, 2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 279-3557

Group 3 Fungicide

# TOPGUARD® Fungicide

{Alternate Brand Name: TOPGUARD® Fungicide Specialty Crops} {When an alternate brand name is used, it will also be used in the body of the label.}

For use on corn (field corn, field corn grown for seed, and popcorn); cotton (foliar application only); vegetables, cucurbit, group 9 (excluding muskmelons); vegetables, fruiting, group 8-10; grapes (fresh, table, wine, raisin); hops, peanut; pome fruit (apple, crabapple, loquat, Mayhaw, pear, oriental pear, quince); grain sorghum; soybean; stone fruit; sugar beet; pecan and other tree nuts; triticale; wheat (spring and winter).

### **ACTIVE INGREDIENT:**

\*Flutriafol 11.8%
OTHER INGREDIENTS: 88.2%
TOTAL: 100.0%

\*Contains 1.04 pounds per gallon of the active ingredient flutriafol. Suspension concentrate.

# Keep Out of Reach of Children CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

# IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800- 331-3148

- OR -

For MEDICAL	For SPILLS
<b>EMERGENCY</b>	CHEMTREC
1-866-331-3148	1-800-424-9300

Notice: Read the entire Directions for Use, Warranty Disclaimer, Inherent Risks of Use, and Llmitation of Remedies before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

**Note to PM**, the following bracketed statements are individually optional depending on the packaging configuration and whether a booklet label design is used:

- a.[See First Aid statement on back [label] [panel] [of booklet]].
- b.[See additional precautionary statements and Directions for Use in booklet.]
- c.[Read the entire label before using this product.]
- d.[See First Aid, Precautionary Statements, and Directions for Use on individual packages.]

> Sold by: FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103

TOPGUARD is a registered trademark of FMC

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution.** Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently skin contact may cause allergic reactions in some individuals.

### **FIRST AID**

### If on skin:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

#### If swallowed:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything to an unconscious person.

# If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

Note to Physician: No specific antidote. Treat symptomatically.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and all other handlers must wear**: long-sleeved shirt and long pants, chemical-resistant gloves, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### **ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### **USER SAFETY RECOMMENDATIONS**

Users should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

This formulated product is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Ground Water Advisory: Flutriafol has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

[Note to Reviewer: Below is optional state specific language.]

[Optional language for CA: In California, this product may only be applied to fields that are not irrigated, or are irrigated using pressurized irrigation methods such as macro-sprinkler, micro-sprinkler, or drip systems.]

[Optional language for NY: Not for sale, distribution, or use in Nassau or Suffolk Counties of New York State.]

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). The REI for each crop is located in the use directions for each crop.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls, chemical resistant gloves, and shoes plus socks.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage**: Store unused product in original container in a cool, dry, secure area.

**Pesticide Disposal:** Pesticide wastes may be hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

## **Container Handling:**

Nonrefillable container. [equal to or less than 5 gallons]

Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure 2 more times.

**Nonrefillable container.** [greater than 5 gallons] [and less than 260 gallons] Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse as follows:

Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank and store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or a mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

{Note to PM, IBC's may be nonrefillable or refillable, the container handling section will state either Nonrefillable or Refillable.}

Nonrefillable container. {or}

Refillable container.

Bottom discharge IBC.

Pressure rinsing the container before final disposal is the responsibility of the person disposing of the container. To pressure rinse the container before final disposal, empty the remaining contents from the IBC into application equipment or mix tank. Raise the bottom of the IBC by 1.5 inches on the side which is opposite of the bottom discharge valve to promote more complete product removal. Completely remove the top lid of the IBC. Use water pressurized to at least 40 PSI to rinse all interior portions. Continuously pump or drain rinsate into application equipment or rinsate collection system while pressure rinsing. Continue pressure rinsing for 2 minutes or until rinsate becomes clear. Replace the lid and close bottom valve.

### PRODUCT DIRECTIONS

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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## **Chemigation:**

### **Application through Irrigation Systems (Chemigation):**

Apply TOPGUARD Fungicide through irrigation to crops at rates and timings specified in this label. Chemical tank and injector system must be thoroughly cleaned before and after use. Flush system with clean water.

**Drip Irrigation:** Use TOPGUARD Fungicide for control of soilborne diseases at rates and timing as specified in this label. Ensure adequate soil moisture prior to utilizing TOPGUARD Fungicide in a drip irrigation system. Do not apply TOPGUARD Fungicide through drip irrigation that is deeper than 12" below the soil surface.

Discontinue drip irrigation application at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. Delay subsequent irrigation (water only) for at least 24 hours following drip application for best results.

**Sprinkler Irrigation:** Apply this product through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, micro sprinkler or hand move irrigation systems. Do not apply this product through any other type of irrigation system except as specified on this label.

With Center Pivot irrigation equipment, use TOPGUARD Fungicide only with equipment with drive systems that provide uniform water distribution. Do not use end guns for chemigation due to the non-uniform application pattern.

Add TOPGUARD Fungicide to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. Maintain agitation during the entire application period.

For continuous-move irrigation systems, apply the labeled rate for that crop in ½ acre-inch or less per acre. For stationary or non-continuous moving systems, inject TOPGUARD Fungicide spray mixture during the last 20-30 minutes of the set.

Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control.

If you have questions about calibration you should contact a State Extension Service specialist, equipment manufacturer or other expert.

# **Operating Requirements for Application through Irrigation Systems:**

- 1. Do not use chemigation when conditions are favorable for drift to non-target areas.
- To prevent water-source contamination from backflow, a functional check valve, vacuum relief valve, and low-pressure drain should be located on the irrigation pipeline.
- 3. To prevent backflow back toward the injection pump, the pesticide injection pipeline must be equipped with a functional, automatic, quick-closing check valve.
- 4. To prevent fluid from being withdrawn from the supply tank when the irrigation system is shut down, the pesticide injection pipeline should also be equipped with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock.
- 5. The system must also contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops and a functional pressure switch to stop the pump motor when water pressure decreases to a point at which pesticide distribution is adversely affected.
- 6. A metering pump, constructed of materials compatible with pesticides and capable of being fitted with a system interlock, such as a positive displacement injection pump (e.g., a diaphragm pump), must be included in the system.
- 7. A knowledgeable person responsible for the chemigation system should shut the system down and turn the irrigation water off, ensuring enough time for the pesticide to be flushed through all lines and nozzles.
- 8. No irrigation system, including those in greenhouses, used to distribute pesticides can be connected to a public water source unless safety measures and devices prescribed in the pesticide label for such connection are in place.

## **Specific Instructions for Public Water Systems:**

- 1. Public water system means a system that provides piped water for human consumption if the system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. All measures and devices listed in the above section, "Operating Requirements for Application through Irrigation Systems", must be operational for connection to a public water system.
- 3. Additionally, chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There must be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

**Rainfastness**: TOPGUARD Fungicide is rainfast 2 hours after application. Disease control will be reduced if rainfall occurs within 2 hours of application.

Crop Rotation: Fields treated with an application rate of greater than 0.228 lbs.ai/acre/season may be planted to the following crops that have tolerances established for residues of flutriafol: field corn; field corn grown for seed; popcorn; cotton; cucurbits; fruiting vegetables; grapes; hops; Brassica leafy vegetables crop group 5; leafy vegetables, except Brassica, crop group 4; peanut; pome fruit; grain sorghum; soybean; stone fruit; strawberry; sugar beet; tomato; tree nuts; triticale; or wheat immediately after the last application. Fields treated with application rates less than or equal to 0.228 lbs.ai/acre/season may be planted to the crops listed above, and may also be planted to sweet corn 180 days after the last application. Rotation to any other crop is prohibited.

### RATE EQUIVALENCY TABLE

Product Rate	Equivalent Active Ingredient Rate
(fl. oz./A)	(lb a.i./A)
7.0	0.057
8.0	0.065
9.0	0.073
10.0	0.081
11.0	0.089
12.0	0.098
13.0	0.106
14.0	0.114

**Compatibility Jar Test:** TOPGUARD Fungicide is compatible with most products, however not all combinations have been tested. Use the following compatibility jar test to ensure physical compatibility.

Using a quart jar, add the proportionate amounts of the products to approximately one quart of water with agitation. Add wettable powders and water dispersible granular products first, next liquid flowables, then emulsifiable concentrates, and last liquid soluble products. After thorough mixing, allow this mixture to stand for 5 minutes. If the combination remains mixed or can be readily remixed, it is physically compatible. Once compatibility has been proven, use the same procedure for adding products to the spray tank. Use tank mix combinations on a small number of plants before treating larger areas. When tank mixing, follow more restrictive labeling of any tank mix partner. Do not tank mix with any product that contains a prohibition on tank mixing.

**Use of Adjuvants:** An adjuvant may be used with TOPGUARD Fungicide unless otherwise specified in the crop use directions. TOPGUARD Fungicide is compatible with most products, however not all have been tested. Use the compatibility jar test to ensure physical compatibility.

**Tank Mixing:** TOPGUARD Fungicide may be tank mixed with other fungicides, herbicides, insecticides, and/or other additives unless prohibited on the label of the tank mix partner. Follow more restrictive labeling of any tank mix partner. Although

TOPGUARD Fungicide is compatible with most products, not all combinations have been tested. Use the compatibility jar test to ensure physical compatibility. Before applying any tank mixture not specifically recommended on this label, the crop safety of the target crop should be confirmed by applying the mixture to a small area of the target crop in accordance to the label instructions.

**Spray Equipment/Volume:** TOPGUARD Fungicide should be applied in sufficient water volume to ensure thorough coverage as a broadcast foliar application for good disease control.

For ground application, use a minimum of 10 gallons of spray solution per acre by ground sprayer. For aerial application, use aircraft spray equipment in a minimum of 10 gallons of spray solution per acre for tree nut crops, 2 gallons of spray solution per acre for corn, cotton, grain sorghum, soybean, wheat and triticale, and 5 gallons of spray solution per acre for all other crops.

**Resistance Management**: TOPGUARD Fungicide contains the active ingredient flutriafol, which is a Group 3 fungicide based on the mode of action classification system. Repeated use of the same group of fungicides for a targeted disease may lead to the selection of resistant strains of fungi and result in reduced disease control.

To maintain performance of TOPGUARD Fungicide and other fungicides in the same group, tank mix or rotate with a different fungicide group for good disease resistance management. For assistance on a particular crop and disease control situation, consult your local agricultural dealer, consultant, applicator, or state extension personnel for specific practices or recommendations in your area.

**High Disease Pressure:** Where a range is given, use the higher rate of TOPGUARD Fungicide and/or reduced spray interval when disease pressure is high and/or conditions are favorable for disease development.

# **CROP USE DIRECTIONS**

# Use Directions for Corn (Field Corn, Field Corn Grown for Seed, and Popcorn)

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Gray Leaf Spot (Cercospora zeae-maydis)  Southern Corn Leaf Blight (Cochlibolus heterostrophus)  Northern Corn Leaf Blight (Setosphaeria turcica)  Rust, Common (Puccinia sorghi)  Southern Rust (Puccinia polysora)	7 to 14	Apply preventatively or when conditions are favorable for disease development. One repeat application may be made.  Apply no later than growth stage R4 (early dough stage).  For aerial application, use a minimum of 2 gallons of spray solution	7 7
Eyespot (Aureobasidium zeae)  Anthracnose Leaf Blight (Colletotrichum graminicola)  Northern Corn Leaf Spot (Cochliobolus carbonum)		per acre.	

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 2 applications per year.
- Do not apply more than 28 fl. oz. of product/A per year.
- Do not apply more than 0.228 lb. ai of flutriafol/A per year.
- An adjuvant may be used with TOPGUARD Fungicide prior to the V8 corn growth stage and after the VT corn growth stage.
- Restricted Entry Interval (REI): The REI for detasselling field corn and popcorn grown for seed is 5 days. The REI for all other activities is 12 hours.
- Preharvest Interval: Zero (0) day of harvest for forage, and 7 days for stover and grain of field corn and popcorn.

# **Use Directions for Cotton (foliar application only)**

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Alternaria Leaf Spot, Boll Rot (Alternaria spp.)	7 to 14	Apply preventatively or when conditions are favorable for	7
Anthracnose, Boll Rot (Glomerella spp.)		disease development. Repeat as necessary if conditions are favorable for disease	
Ascochyta Blight, Boll Rot (Ascochyta gossypii)		development.	
Cercospora Blight and Leaf Spot (Cercospora spp.)			
Diplodia Boll Rot ( <i>Diplopia</i> spp.)			
Fusarium Boll Rot (Fusarium spp.)			
Phoma Blight, Boll Rot ( <i>Phoma</i> spp.)			
Rust ( <i>Puccinia</i> spp., <i>Phykopsora</i> spp.)			
Stemphyllium Leaf Spot (Stemphyllium spp.)			
Target Spot (Corynespora cassiicola)			

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 2 foliar applications per year.
- Do not apply more than 0.228 lb.ai of flutriafol/acre per year (including foliar and soil applications.)
- Restricted Entry Interval (REI): The REI is 12 hours.
- Preharvest Interval: Do not apply within 30 days of harvest.

# Use Directions for Vegetables, Cucurbit, Group 9 (excluding Muskmelons). See below for a list of crops.

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Sphaerotheca fuliginea, Erysiphe cichoracearum)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	7
Gummy Stem Blight (Didymella bryoniae)  Target Spot (Corynespora cassiicola)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.  Tank mix with KOVERALL Fungicide (mancozeb) for resistance management.  In fields with known triazole resistance, apply TOPGUARD Fungicide with KOVERALL® Fungicide or alternate fungicide group for disease control.	7
Soilborne Diseases: Charcoal Rot (Macrophomina phaseolina)	14	Product is to be applied through drip irrigation (see Chemigation section). Make initial application at transplanting. Make a second application 30 days later. Additional applications may be made on a 30 day interval, as needed.	30

**List of Cucurbits**: Chayote (Fruit), Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd Edible (Lagenaria spp.) (Hyotan, Cucuzza, Hechima, Chinese Okra), *Momordica* spp. (Balsam Apple, Balsam Pear, Bittermelon, Chinese Cucumber), Pumpkin, Squash (Summer), Squash (Winter –Butternut Squash, Calabaza, Hubbard Squash, Acorn Squash, Spaghetti Squash), Watermelon.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: May be applied the day of harvest (0 day PHI).

# Use Directions for Grapes [(fresh, table, wine, raisin)]

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew ( <i>Uncinula necator</i> )	8 to 10	Apply TOPGUARD Fungicide as a foliar spray beginning at 6 to 10 inch shoots.	14 to 21
Black Rot (Guignardia bidwellii)	8 to 10	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	14 to 21

- No single application may exceed 10 fl. oz. of product/A.
- Do not apply more than 6 applications of product per year.
- Do not apply more than 60 fl. oz. of product/A per year.
- Do not apply more than 0.488 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI): The REI for girdling or turning of grapes is 5 days. The REI for all other activities is 12 hours.
- Preharvest Interval: Do not apply within 14 days of harvest.

**Use Directions for Hops** 

Diseases	Product Rate (fl. oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Podosphaera macularis, Sphaerotheca macularis)	10 - 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.  Apply a minimum of 30 gallons per acre spray volume for ground applications and 10 gallons per acre for aerial applications.	14

- Do not apply more than 4 applications per year
- Do not apply more than 56 fl. oz./A per year
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- An adjuvant may be used with TOPGUARD Fungicide
- Restricted Entry Interval (REI) is 12 hours
- Preharvest Interval: Do not apply within 7 days of harvest

### **Use Directions for Peanut**

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Early Leaf Spot (Cercospora arachidicola)  Late Leaf Spot (Cercosporidium personatum)  Peanut Rust (Puccinia arachidis)  Leaf Scorch/ Pepper Spot (Leptosphaerulina crassiasca)	7 to 14	Apply on a preventive spray schedule for effective disease control in peanuts.  TOPGUARD Fungicide can be tank mixed with KOVERALL Fungicide (mancozeb) for improved disease control and resistance management.	14
Web Blotch ( <i>Phoma arachidicola</i> )			
Suppression of Soil-Borne Diseases: White Mold / Southern Stem Rot (Sclerotium rolfsii)	7 to 14	For soil-borne diseases, rainfall or irrigation will optimize activity of TOPGUARD® Fungicide. Tank-mix with other labeled fungicides for improved activity on soil-borne diseases.	14

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 7 days of harvest.

# Use Directions for Pecan and Other Tree Nuts. See below for list of crops.

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Pecan Scab	7 to 14	For Pecan Scab control,	7
(Fusicladium effusum)		start application at bud	
Dowdon, Mildow		break. Continue application 10-14 days pre-pollination;	
Powdery Mildew (Microsphaera penicillata)		14-21 days post-pollination.	
(IVIICIOSPITAETA PETIICIIIAIA)		14-21 days post-polimation.	
Alternaria Leaf and Fruit Spot		For all other disease apply	
(Alternaria alternata)		preventatively or when	
		conditions are favorable for	
Anthracnose		disease development.	
(Colletotrichum acutatum)		Repeat as necessary if conditions are favorable for	
Shothole		disease development.	
(Wilsonomyces carpophilus)		alocado aovelopment.	
Eastern Filbert Blight			
(Anisogramma anomale)			
Provin Bot Blossom Blight			
Brown Rot Blossom Blight (Monilinia fructicola)			
(Wormina Tracticola)			
Leaf Rust			
(Tranzschelia discolor)			
D O			
Downy Spot			
(Mycosphaerella caryigena)			
Zonate Leaf Spot			
(Cristulariella moricola)			

**List of Tree Nuts:** African Tree Nut, Brazil Nut, Burr Oak, Butternut, Cajou, Cashew, Castanha-Do-Maranhao, Coconut, Coquito Nut, Dika nut, Guiana Chestnut, Hazelnut, Heartnut, Hickory Nut, Japanese Horse-Chestnut, Macadamia Nut, Monogongo Nut, Monkey-Pot, Pachira Nut, Pecan, Sapucaia Nut.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 14 days of harvest.

# Use Directions for Vegetables, Fruiting, Group 8-10. See below for list of crops.

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Leveillula taurica)  Anthracnose (Colletotrichum coccedes, C. acutatum)	14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	7
Cercospora Leaf Spot (Cercospora capsici)			
Soilborne Diseases: Charcoal Rot (Macrophomina phaseolina)	14	Product is to be applied through drip irrigation (see Chemigation section). Make initial application at transplanting. Make a second application 30 days later. Additional applications may be made on a 30 day interval, as needed.	30

**List of Fruiting Vegetables**: African Eggplant, Bell Pepper, Eggplant, Martynia, Non-Bell Pepper, Okra, Pea Eggplant, Pepino, Roselle, Scarlet Eggplant, and cultivars, varieties and/or hybrids of these crops.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: May be applied the day of harvest (0 day PHI).

# Use Directions for Pome Fruit (Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, and Quince)

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Podosphaera leucotricha)  Quince Rust (Gymnosporangium clavipes)  Cedar Apple Rust (Gymnosporangium juniperi-virginianae)	8 to 12	Initiate applications at green tip and continue through cover sprays.	10
Apple Scab (Venturia inaequalis)	13	Initiate applications at green tip or when environmental conditions are favorable for primary scab development. Continue applications through the duration of primary scab.  Mix TOPGUARD Fungicide with a protectant such as KOVERALL Fungicide (mancozeb) for scab control.	7 - 10
Pear Scab (Venturia pirina)	13	Start application at Pink Bud and continue through the duration of the Primary Scab period.  Mix TOPGUARD Fungicide with a protectant such as KOVERALL Fungicide for improved scab control.	7 - 10

- No single application may exceed 13 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 52 fl. oz. of product/A per year.
- Do not apply more than 0.423 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 14 days of harvest.

# **Use Directions for Grain Sorghum**

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Anthracnose Leaf Blight (Colletotrichum graminicola) Ergot	7 to 14	For Ergot make first application at, or just prior to, flowering.	7
(Claviceps sorghi)		For all other diseases	
Gray Leaf Spot (Cercospora sorghi)		apply preventatively or when conditions are	
Leaf Blight (Exserohilum turcicum or Setosphaeria turcica)		favorable for disease development. Repeat as necessary if conditions are favorable for disease	
Rust, Common (Puccinia purpuria		development.	
Ladder Leaf Spot (Cercospora fusimaculans)			
Rough Spot (Ascochyta sorghi)			
Sooty Stripe (Ramulispora sorghi)			
Target Leaf Spot (Bipolaris cookei)			
Zonate Leaf Spot and Sheath Blight (Gloecercospora sorghi)			

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 2 applications per year.
- Do not apply more than 28 fl. oz. of product/A per year.
- Do not apply more than 0.228 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 30 days of harvest for stover, forage or grain.

# **Use Directions for Soybean (Foliar Applications)**

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Cercospora Leaf Blight and Purple Seed Stain (Cercospora kikuchii)  Frogeye Leaf Spot (Cercospora sojina)  Brown Spot (Septoria glycines)  Powdery Mildew (Microsphaera diffusa)  Target Spot (Corynespora cassiicola)  Suppression: White Mold / Stem Rot (Sclerotinia sclerotiorum)	7 to 14	For Cercospora Leaf Blight begin applications at first flower (R1).  For other diseases apply beginning at first visible flower or when conditions are favorable for disease development.  Apply additional applications if environmental conditions are favorable for continued disease development.	14 – 35
Southern Blight (Sclerotium rolfsii)			
Rust (Phakopsora pachyrhizi)	7 to 14	Apply beginning at first visible flower or when conditions are favorable for disease development.  Apply additional applications if environmental conditions are favorable for continued disease development.	21 – 35

# [Use Directions for Soybean (Foliar Applications) (continued)]

- No single at-planting application may exceed 32 fl. oz. of product/A.
- No single foliar application may exceed 14 fl. oz. of product/A.
- Do not apply more than 3 foliar applications per year.
- Do not apply more than 1 at-planting application per year.
- For foliar applications: Two foliar applications can be made at 14 fl. oz. of product/A – OR - One foliar application at 14 fl. oz. of product/A followed by two additional foliar applications at 7 fl. oz. of product/A.
- Do not apply more than 60 fl. oz. of product/A per year.
- Do not apply more than 0.488 lb. ai of flutriafol/A per year (including soil and foliar applications)
- Restricted Entry Interval (REI) is 12 hours.
- Do not feed forage or hay to animals or permit animals to graze.
- Preharvest Interval: Do not apply within 21 days of harvest.

# **Use Directions for Soybean (At Planting Applications)**

Suppression of Soilborne	16 to 32	See table below for rate chart	
Diseases:		depending on row width.	
Sudden Death Syndrome (Fusarium solani f. sp. glycines, F. virguliforme)		Apply in 3 to 6 gallons of water per acre at planting.	
		Methods of application:	
Charcoal Rot (Macrophomina phaseolina)		T-Band Application: Apply TOPGUARD Fungicide in a concentrated 3-4 inch wide band at planting with the spray tip oriented perpendicular to the row direction and with spray tip located after furrow opening and seed placement but prior to furrow closure with press wheel.	
		In-Furrow / Modified In-Furrow Application: Apply in furrow using a mechanism that guides the product so as not to come into direct contact with the seed.  Temporary soybean height reductions are sometimes noted when TOPGUARD is applied infurrow or by and T-band applications. The height reduction is temporary and soybeans will recover over a period of 2 to 3 weeks.	

# [Use Directions for Soybean (At Planting applications) (continued)]

### **Restrictions:**

- No single at-planting application may exceed 32 fl. oz. of product/A.
- No single foliar application may exceed 14 fl. oz. of product/A.
- Do not apply more than 3 foliar applications per year.
- Do not apply more than 1 at-planting application per year.
- For foliar applications: Two foliar applications can be made at 14 fl. oz. of product/A – OR - One foliar application at 14 fl. oz. of product/A followed by two additional foliar applications at 7 fl. oz. of product/A.
- Do not apply more than 60 fl. oz. of product/A per year.
- Do not apply more than 0.488 lb. ai of flutriafol/A per year (including soil and foliar applications)
- Restricted Entry Interval (REI) is 12 hours.
- Do not feed forage or hay to animals or permit animals to graze.
- Preharvest Interval: Do not apply within 21 days of harvest.

Rate Chart: Product Rate Depending on Row Width

	Fl. oz. of TOPGUARD/1000 ft. of Row		
Row Spacing (inches)	16 fl. oz./A Rate	32 fl. oz./A Rate	
20	0.67	1.35	
30	0.92	1.84	
32	0.98	1.96	
36	1.10	2.20	
38	1.16	2.32	
40	1.22	2.45	

20" = 23,760 row ft./A; 30" = 17,424 row ft./A; 32" = 16,315 row ft./A; 34" = 15,374 row ft./A; 36" = 14,520 row ft./A; 38" = 13,754 row ft./A; 40" = 13,068 row ft./A.

Formula: Selected Use Rate (fl. oz./A) = fl. oz. of product to be applied per 1000 row ft. [Row ft for row spacing/1000 ft]

Example of 30" row spacing at 16 fl. oz./A:

 $\frac{16 \text{ fl. oz/A}}{[17,424/1000]}$  = 0.92 fl. oz. of product to be applied per 1000 row ft.

Use Directions for Stone Fruit (See below for a list of crops.)

[Optional language: Use Directions for Cherry (Sweet and Tart)]

Diseases	Product	Application Directions	Application
	Rate		Interval
	(fl.oz./A)		(Days)
Powdery Mildew	14	Start applications at petal	7
(Podosphaera clandestina)		fall. Repeat as necessary if	
		disease conditions are	
		favorable for disease	
		development.	
Brown Rot Blossom Blight (Monilinia fructicola)	14	Start applications at 1-5% bloom followed by an application at 50-100 % bloom.	7
Fruit Brown Rot	14	Apply one to two weeks	7
(Monilinia fructicola)		prior to harvest.	
Cherry Leaf Spot ( <i>Blumeriella jaapii</i> )	14	Start applications at petal fall. Repeat as necessary if disease conditions are favorable for disease development.	7
		In areas of known triazole resistance, apply TOPGUARD Fungicide with a protectant fungicide for	
		control.	

List of Stone Fruit: Apricot, Nectarine, Sweet Cherry, Tart Cherry, Peach, Plum, Chicksaw Plum, Damson Plum, Japanese Plum, Plumcot, Prune.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 7 days of harvest.

# **Use Directions for Sugar Beet**

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Cercospora Leaf Spot (Cercospora beticola)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.  Tank mix with KOVERALL Fungicide (mancozeb) for resistance management.	14
Powdery Mildew (Erysiphe betae)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	14

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 2 applications per year.
- Do not apply more than 28 fl. oz. of product/A per year.
- Do not apply more than 0.228 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 21 days of harvest.

Use Directions for Wheat (Spring and Winter) and Triticale

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Rust (Puccina spp.)  Powdery Mildew (Blumeria graminis tritici)  Leaf and Glume Blotch	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	7
(Septoria spp.)		For aerial application, use a minimum of 2 gallons of spray solution per acre.	
Suppression: Fusarium Head Blight (Fusarium spp.)	10 to 14	Apply at anthesis (Feekes Growth Stage 10.51). Spray equipment nozzles should be properly set up to ensure good coverage of the head.	7
		For aerial application, use a minimum of 2 gallons of spray solution per acre.	

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 2 applications per year.
- Do not apply more than 28 fl. oz. of product/A per year.
- Do not apply more than 0.228 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: Do not apply within 30 days of harvest when grown for grain, 15 days of harvest grown for hay, zero (0) day PHI when grown for forage.

### WARRANTY DISCLAIMER

FMC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

### **INHERENT RISKS OF USE**

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of FMC or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold FMC and the Seller harmless for any claims related to such factors.

### LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following, at FMC's election:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, FMC shall not be liable for consequential, incidental, or special damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of FMC or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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11-12-2015 12-21-2015

# **TOPGUARD®** Fungicide

EPA Reg. No. 279-3557 formerly 67760-75

Group 3 Fungicide

# ACCEPTED

Dec 29, 2015

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 279-3557

For soilborne disease control on vegetables, cucurbit, group 9 (excluding muskmelons); vegetables, fruiting, group 8-10; and soybean.

THIS SUPPLEMENTAL LABEL EXPIRES ON December 28, 2018 AND MUST NOT BE USED OR DISTRIBUTED AFTER THIS DATE

### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read the entire label. This label must be in the possession of the user at the time of application. Read the label affixed to the container for TOPGUARD Fungicide before applying. Use of TOPGUARD Fungicide according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the TOPGUARD Fungicide container.

### **Chemigation:**

### **Application through Irrigation Systems (Chemigation):**

Apply TOPGUARD Fungicide through irrigation to crops at rates and timings specified in this label. Chemical tank and injector system must be thoroughly cleaned before and after use. Flush system with clean water.

**Drip Irrigation:** Use TOPGUARD Fungicide for control of soilborne diseases at rates and timing as specified in this label. Ensure adequate soil moisture prior to utilizing TOPGUARD Fungicide in a drip irrigation system. Do not apply TOPGUARD Fungicide through drip irrigation that is deeper than 12" below the soil surface.

Discontinue drip irrigation application at fungicide depletion from the main feed supply tank or after 6 hours from start, whichever is shorter. Delay subsequent irrigation (water only) for at least 24 hours following drip application for best results.

**Sprinkler Irrigation:** Apply this product through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, micro sprinkler or hand move irrigation systems. Do not apply this product through any other type of irrigation system except as specified on this label.

With Center Pivot irrigation equipment, use TOPGUARD Fungicide only with equipment with drive systems that provide uniform water distribution. Do not use end guns for chemigation due to the non-uniform application pattern.

Add TOPGUARD Fungicide to the pesticide supply tank containing sufficient water to maintain a continuous flow by the injection equipment. Maintain agitation during the entire application period.

For continuous-move irrigation systems, apply the labeled rate for that crop in ½ acre-inch or less per acre. For stationary or non-continuous moving systems, inject TOPGUARD Fungicide spray mixture during the last 20-30 minutes of the set.

Do not apply when winds are greater than 10-15 mph to avoid drift or wind skips. Do not apply when wind speed favors drift beyond the area intended for treatment. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. Thorough coverage of foliage is required for good control.

If you have questions about calibration you should contact a State Extension Service specialist, equipment manufacturer or other expert.

### **Operating Requirements for Application through Irrigation Systems:**

- 1. Do not use chemigation when conditions are favorable for drift to non-target areas.
- 2. To prevent water-source contamination from backflow, a functional check valve, vacuum relief valve, and low-pressure drain should be located on the irrigation pipeline.
- 3. To prevent backflow back toward the injection pump, the pesticide injection pipeline must be equipped with a functional, automatic, quick-closing check valve.
- 4. To prevent fluid from being withdrawn from the supply tank when the irrigation system is shut down, the pesticide injection pipeline should also be equipped with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock.
- 5. The system must also contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops and a functional pressure switch to stop the pump motor when water pressure decreases to a point at which pesticide distribution is adversely affected.
- 6. A metering pump, constructed of materials compatible with pesticides and capable of being fitted with a system interlock, such as a positive displacement injection pump (e.g., a diaphragm pump), must be included in the system.
- 7. A knowledgeable person responsible for the chemigation system should shut the system down and turn the irrigation water off, ensuring enough time for the pesticide to be flushed through all lines and nozzles.
- 8. No irrigation system, including those in greenhouses, used to distribute pesticides can be connected to a public water source unless safety measures and devices prescribed in the pesticide label for such connection are in place.

### **Specific Instructions for Public Water Systems:**

- 1. Public water system means a system that provides piped water for human consumption if the system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2. All measures and devices listed in the above section, "Operating Requirements for Application through Irrigation Systems", must be operational for connection to a public water system.
- 3. Additionally, chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back-flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There must be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

**Crop Rotation:** Fields treated with an application rate of greater than 0.228 lbs.ai/acre/season may be planted to the following crops that have tolerances established for residues of flutriafol: field corn; field corn grown for seed; popcorn; cotton; cucurbits; fruiting vegetables; grapes; hops; Brassica leafy vegetables crop group 5; leafy vegetables, except Brassica, crop group 4; peanut; pome fruit; grain sorghum; soybean; stone fruit; strawberry; sugar beet; tomato; tree

# SUPPLEMENTAL LABELING

nuts; triticale; or wheat immediately after the last application. Fields treated with application rates less than or equal to 0.228 lbs.ai/acre/season may be planted to the crops listed above, and may also be planted to sweet corn 180 days after the last application. Rotation to any other crop is prohibited.

## RATE EQUIVALENCY TABLE

Product Rate	Equivalent Active Ingredient Rate
(fl. oz./A)	(lb a.i./A)
7.0	0.057
8.0	0.065
9.0	0.073
10.0	0.081
11.0	0.089
12.0	0.098
13.0	0.106
14.0	0.114

Use Directions for Vegetables, Cucurbit, Group 9 (excluding Muskmelons). See below for a list of crops.

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Sphaerotheca fuliginea, Erysiphe cichoracearum)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	7
Gummy Stem Blight (Didymella bryoniae)  Target Spot (Corynespora cassiicola)	10 to 14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.  Tank mix with KOVERALL Fungicide (mancozeb) for resistance management.  In fields with known triazole resistance, apply TOPGUARD Fungicide with KOVERALL® Fungicide or alternate fungicide group for disease control.	7
Soilborne Diseases: Charcoal Rot (Macrophomina phaseolina)	14	Product is to be applied through drip irrigation (see Chemigation section). Make initial application at transplanting. Make a second application 30 days later. Additional applications may be made on a 30 day interval, as needed.	30

**List of Cucurbits**: Chayote (Fruit), Chinese Waxgourd, Citron Melon, Cucumber, Gherkin, Gourd Edible (Lagenaria spp.) (Hyotan, Cucuzza, Hechima, Chinese Okra), *Momordica* spp. (Balsam Apple, Balsam Pear, Bittermelon, Chinese Cucumber), Pumpkin, Squash (Summer), Squash (Winter –Butternut Squash, Calabaza, Hubbard Squash, Acorn Squash, Spaghetti Squash), Watermelon.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: May be applied the day of harvest (0 day PHI).

Use Directions for Vegetables, Fruiting, Group 8-10. See below for list of crops.

Diseases	Product Rate (fl.oz./A)	Application Directions	Application Interval (Days)
Powdery Mildew (Leveillula taurica)  Anthracnose (Colletotrichum coccedes, C. acutatum)  Cercospora Leaf Spot (Cercospora capsici)	14	Apply preventatively or when conditions are favorable for disease development. Repeat as necessary if conditions are favorable for disease development.	7
Soilborne Diseases: Charcoal Rot (Macrophomina phaseolina)	14	Product is to be applied through drip irrigation (see Chemigation section). Make initial application at transplanting. Make a second application 30 days later. Additional applications may be made on a 30 day interval, as needed.	30

**List of Fruiting Vegetables**: African Eggplant, Bell Pepper, Eggplant, Martynia, Non-Bell Pepper, Okra, Pea Eggplant, Pepino, Roselle, Scarlet Eggplant, and cultivars, varieties and/or hybrids of these crops.

- No single application may exceed 14 fl. oz. of product/A.
- Do not apply more than 4 applications per year.
- Do not apply more than 56 fl. oz. of product/A per year.
- Do not apply more than 0.455 lb. ai of flutriafol/A per year.
- Restricted Entry Interval (REI) is 12 hours.
- Preharvest Interval: May be applied the day of harvest (0 day PHI).

### **Use Directions for Soybean (At Planting Applications)**

Suppression of Soilborne Diseases:	16 to 32	See table below for rate chart depending on row width.	
Sudden Death Syndrome (Fusarium solani f. sp. glycines, F. virguliforme)  Charcoal Rot (Macrophomina phaseolina)		Apply in 3 to 6 gallons of water per acre at planting.  Methods of application: T-Band Application: Apply TOPGUARD Fungicide in a concentrated 3-4 inch wide band at planting with the spray tip	
		oriented perpendicular to the row direction and with spray tip located after furrow opening and seed placement but prior to furrow closure with press wheel.  In-Furrow / Modified In-Furrow	
		Application: Apply in furrow using a mechanism that guides the product so as not to come into direct contact with the seed.	
		Temporary soybean height reductions are sometimes noted when TOPGUARD is applied infurrow or by and T-band applications. The height reduction is temporary and	
		soybeans will recover over a period of 2 to 3 weeks.	

## [Use Directions for Soybean (At Planting applications) (continued)]

- No single at-planting application may exceed 32 fl. oz. of product/A.
- No single foliar application may exceed 14 fl. oz. of product/A.
- Do not apply more than 3 foliar applications per year.
- Do not apply more than 1 at-planting application per year.
- For foliar applications: Two foliar applications can be made at 14 fl. oz. of product/A OR One foliar application at 14 fl. oz. of product/A followed by two additional foliar applications at 7 fl. oz. of product/A.
- Do not apply more than 60 fl. oz. of product/A per year.
- Do not apply more than 0.488 lb. ai of flutriafol/A per year (including soil and foliar applications)
- Restricted Entry Interval (REI) is 12 hours.
- Do not feed forage or hay to animals or permit animals to graze.
- Preharvest Interval: Do not apply within 21 days of harvest.

Rate Chart: Product Rate Depending on Row Width

	Fl. oz. of TOPGUARD/1000 ft. of Row			
Row Spacing (inches)	16 fl. oz./A Rate	32 fl. oz./A Rate		
20	0.67	1.35		
30	0.92	1.84		
32	0.98	1.96		
36	1.10	2.20		
38	1.16	2.32		
40	1.22	2.45		

20" = 23,760 row ft./A; 30" = 17,424 row ft./A; 32" = 16,315 row ft./A; 34" = 15,374 row ft./A; 36" = 14,520 row ft./A; 38" = 13,754 row ft./A; 40" = 13,068 row ft./A.

Formula: Selected Use Rate (fl. oz./A) = fl. oz. of product to be applied per 1000 row ft. [Row ft for row spacing/1000 ft]

Example of 30" row spacing at 16 fl. oz./A:

 $\frac{16 \text{ fl. oz/A}}{[17,424/1000]}$  = 0.92 fl. oz. of product to be applied per 1000 row ft.

#### WARRANTY DISCLAIMER

FMC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of FMC or the Seller. All such risks shall be assumed by Buyer and User. Buyer and User agree to hold FMC and the Seller harmless for any claims related to such factors.

### LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following, at FMC's election:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, FMC shall not be liable for consequential, incidental, or special damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of FMC or the Seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

**TOPGUARD** is a registered trademark of FMC

12-28-15

EPA Reg. No.279-3557, formerly 67760-75 FMC Corporation 1735 Market Street Philadelphia, PA 19103